FATE Projects FY 2006

Physical and ecological time series and indices of oceanographic change in the northern California Current – PI: William Peterson (Northwest Fisheries Science Center)

Long-term relationships among climate, somatic growth, and recruitment in Acadian redfish and the implications for stock assessment – PIs: Bryan Black and George Boehlert (Oregon State University), Ralph Mayo and Jay Burnett (Northeast Fisheries Science Center)

Forward-looking biological indicators for stock assessment, decision rules and management of currently unassessed species – PIs: Ian Stewart and Isaac Kaplan (Northwest Fisheries Science Center)

Use of a coupled biophysical model for development of an index of biological productivity in the coastal upwelling zone of the northern California Current (Year 2) – PIs: Thomas Wainwright and William Peterson (Northwest Fisheries Science Center)

Developing quantitative tools to forecast the effects of climate variability on the population dynamics of Pacific salmon – PIs: Mark Scheuerell and Richard Zabel (Northwest Fisheries Science Center), Nathan Mantua (University of Washington)

Improving stock assessments by explicitly including FATE products – PIs: Michael Schirripa (Northwest Fisheries Science Center) Jim Colbert (Oregon State University)

Ichthyoplankton as indicators of climate and ecosystem change – PIs: Richard Brodeur, Robert Emmett and William Peterson (Northwest Fisheries Science Center), Toby Auth and Lorenzo Ciannelli (Oregon State University)

Fisheries indices for the Southeast Atlantic (FISEA): Biological indicators of coastal and estuary-dependent fishery production in the U.S. South Atlantic – PIs: Gretchen Martin and Kyle Shertzer (Southeast Fisheries Science Center), Jeffrey Buckel and J. Christopher Taylor (NC State University)

A coupled bio-physical approach to fisheries habitat in the southeastern North Atlantic – PIs: Donald Olson (University of Miami) Josh Sladek Nowlis and John Lamkin (Southeast Fisheries Science Center)

Wind-driven transport indices for cod and haddock recruitment on Georges Bank – PIs: David Mountain, James Manning, Loretta O'Brien and Jon Brodziak (Northeast Fisheries Science Center)

Oceanographic indicators for fishery management of northern shrimp (*Pandalus borealis*) – PIs: Anne Richards, Jay O'Reilly and Maureen Taylor (Northeast Fisheries Science Center)

The impact on management performance of including indicators of decadal change in management strategies for the fishery for Walleye pollock in the Gulf of Alaska – PIs: André Punt and Teresa A'mar (University of Washington), Martin Dorn (Alaska Fisheries Science Center)

Development of indices for salmon and pollock survival in the rapidly changing environment of the eastern Bering Sea – PIs: Lisa Eisner, Ed Farley, Angela Middleton, Jack Helle and James Ianelli (Alaska Fisheries Science Center)

Index development and ecosystem monitoring – PIs: Jennifer Boldt (JISAO/University of Washington), Anne Hollowed, Kerim Aydin and Pat Livingston (Alaska Fisheries Science Center)

The future of North Pacific ocean climate from IPCC model projections – PIs: James Overland (Pacific Marine Environmental Laboratory), Nicholas Bond (JISAO/University of Washington)

An investigation of nonlinear forecasting for improved stock projections: Understanding nonlinear couplings between climate change and variability in fish populations – PIs: George Sugihara (University of California, San Diego) John Hunter and Roger Hewitt (Southwest Fisheries Science Center)

Bottom-up and top-down indicators of ecosystem variability: An integrated ecosystem assessment for the California Current system – PIs: Steven Bograd, Frank Schwing, John Field, Brian Wells, Roger Hewitt and Kevin Hill (Southwest Fisheries Science Center), William Sydeman and Julie Thayer (Point Reyes Bird Observatory)